

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P832827

Luminaire Tested: **TTN-D0-735-U-WQ-SG-UPL3**

Issue Date: 5/15/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P832827  
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND  
Test Lab: INNOVATION CENTER  
Issue Date: 5/15/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TTN-D0-735-U-WQ-SG-UPL3  
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT  
3500K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS  
Light Source: -  
Ballast/Driver: -

**Summary**

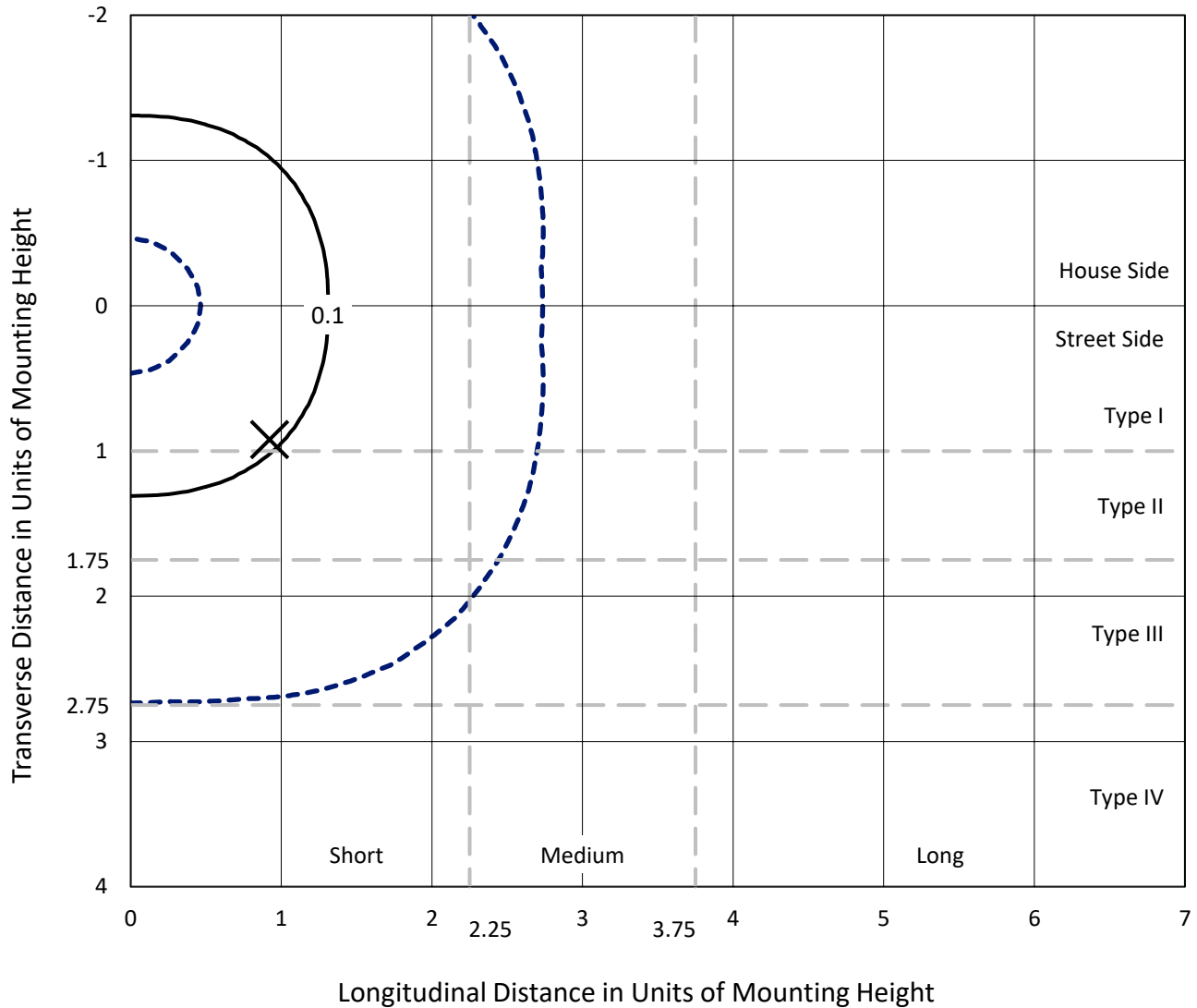
Lumens per Lamp: N/A  
Luminaire Lumens: 1825.7 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')  
IES Classification: Type V - Short  
BUG Rating: B1 - U4 - G1  
  
Input Watts (W): 17.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P832827  
 CATALOG NUMBER: TTN-D0-735-U-WQ-SG-UPL3

### Iso-Footcandle Lines of Horizontal Illumination

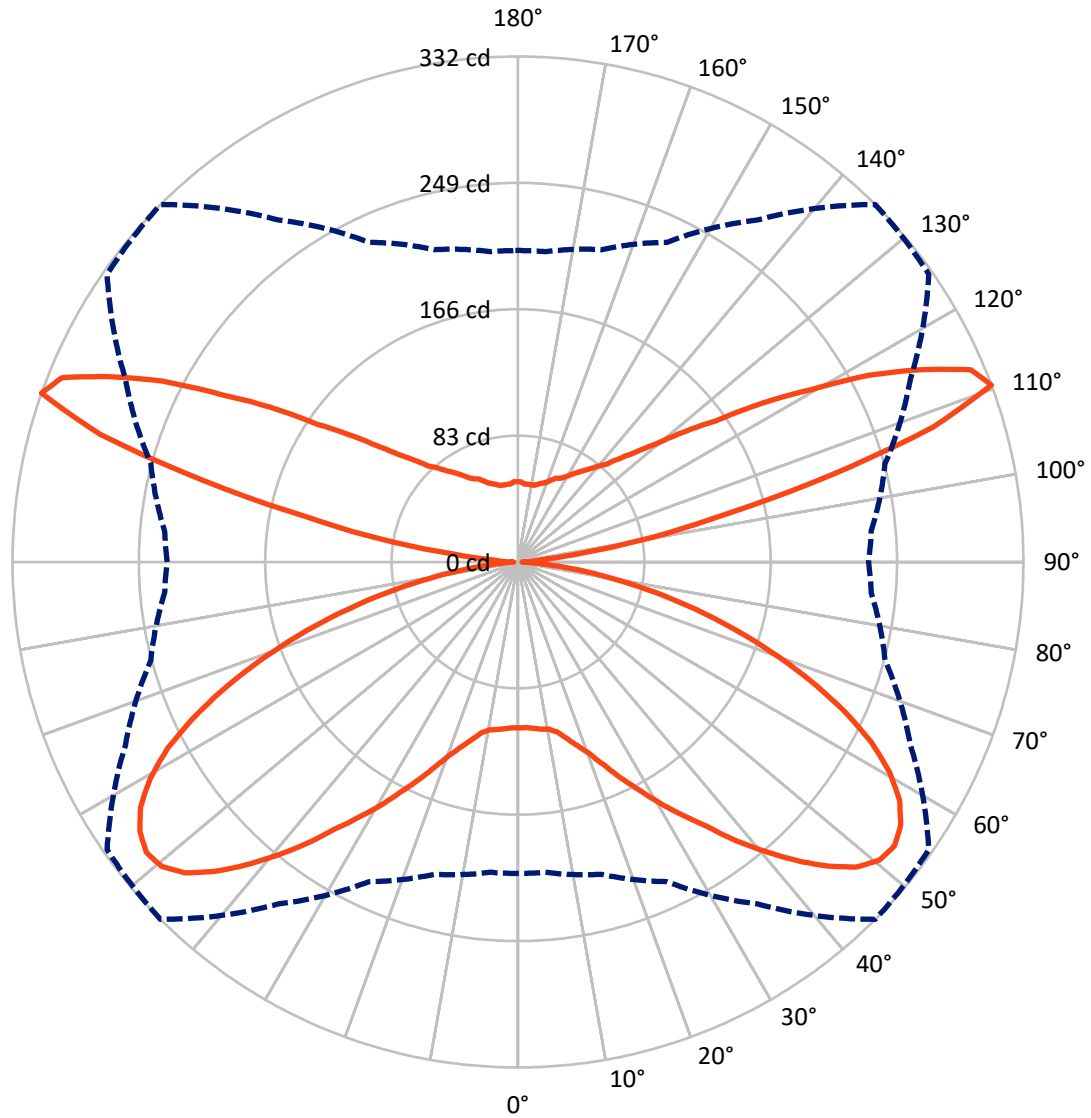
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 fc  
 Type V - Short - N/A

REPORT NUMBER: P832827  
CATALOG NUMBER: TTN-D0-735-U-WQ-SG-UPL3

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 110-Deg Vertical

REPORT NUMBER: P832827  
 CATALOG NUMBER: TTN-D0-735-U-WQ-SG-UPL3

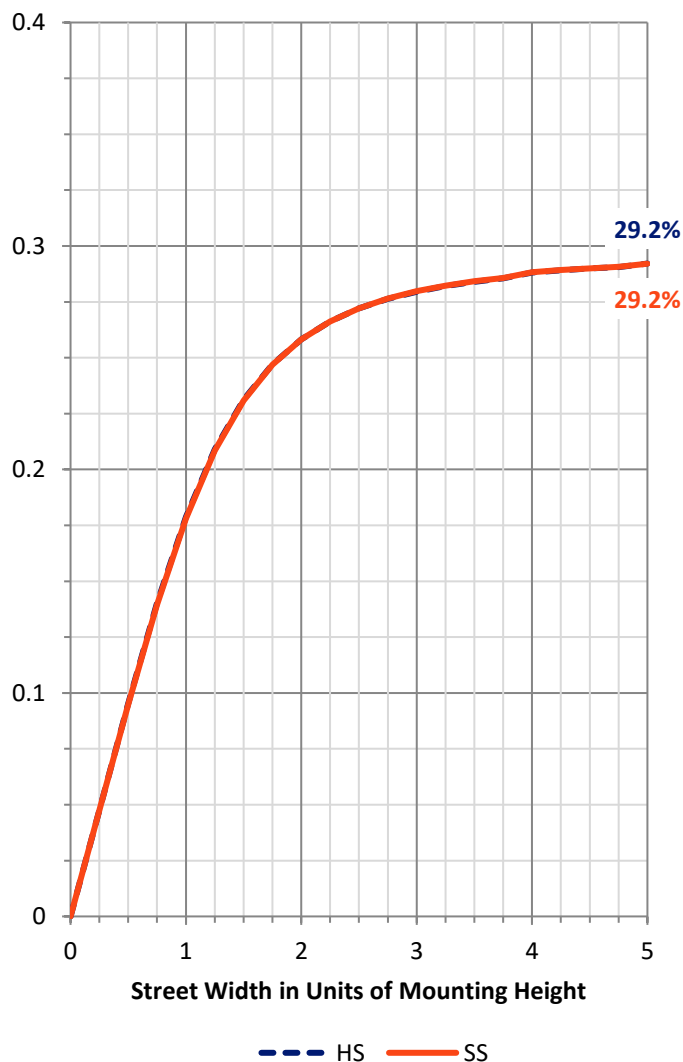
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	536.5	376.3	912.8
	% Fixture	29.4	20.6	50.0
<b>Street Side</b>	Lumens	536.5	376.3	912.8
	% Fixture	29.4	20.6	50.0
<b>Total</b>	Lumens	1073.0	752.7	1825.7
	% Fixture	58.8	41.2	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	10.5	0.6
10°-20°	34.6	1.9
20°-30°	73.0	4.0
30°-40°	133.4	7.3
40°-50°	212.3	11.6
50°-60°	256.7	14.1
60°-70°	215.9	11.8
70°-80°	114.4	6.3
80°-90°	22.2	1.2
90°-100°	16.8	0.9
100°-110°	170.7	9.4
110°-120°	249.6	13.7
120°-130°	144.9	7.9
130°-140°	76.7	4.2
140°-150°	45.6	2.5
150°-160°	28.1	1.5
160°-170°	15.3	0.8
170°-180°	5.0	0.3
0°-90°	1073.0	58.8
0°-180°	1825.7	100.0

**Coefficient of Utilization**

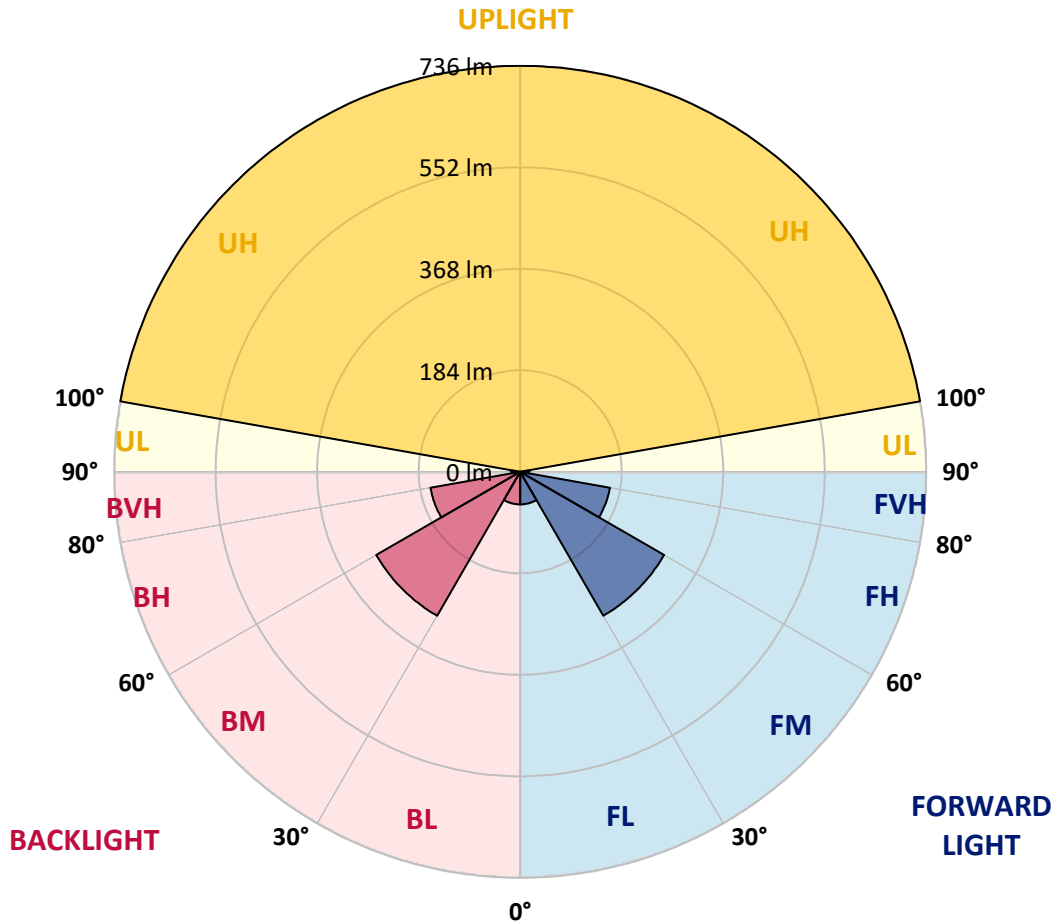


REPORT NUMBER: P832827  
 CATALOG NUMBER: TTN-D0-735-U-WQ-SG-UPL3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	59.1	3.2			
FM (30°-60°)	301.2	16.5			
FH (60°-80°)	165.1	9.0			G0/660
FVH (80°-90°)	11.1	0.6			G1/100
BL (0°-30°)	59.1	3.2	B0/110		
BM (30°-60°)	301.2	16.5	B1/1000		
BH (60°-80°)	165.1	9.0	B1/500		G0/660
BVH (80°-90°)	11.1	0.6			G1/100
UL (90°-100°)	16.8	0.9		U2/50	
UH (100°-180°)	735.8	40.3		U4/1000	

**BUG Rating: B1-U4-G1**  
 Type V Short





REPORT NUMBER: P832827

CATALOG NUMBER: TTN-D0-735-U-WQ-SG-UPL3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0
2.5°	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0
5°	109.9	109.9	109.0	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9
7.5°	109.9	109.9	109.9	110.9	110.9	110.9	110.9	109.9	109.9	109.9	109.9
10°	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8
12.5°	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.7	114.7
15°	119.4	119.4	119.4	119.4	120.4	120.4	120.4	119.4	119.4	119.4	119.4
17.5°	125.1	125.1	126.0	126.0	127.0	127.0	127.0	126.0	125.1	126.0	125.1
20°	133.6	133.6	133.6	134.6	135.5	134.6	135.5	133.6	133.6	133.6	133.6
22.5°	143.1	143.1	143.1	144.1	145.0	145.0	145.0	143.1	143.1	143.1	143.1
25°	154.5	154.5	154.5	155.4	156.4	157.3	157.3	155.4	154.5	154.5	153.5
27.5°	165.9	165.9	167.7	168.7	169.6	169.6	169.6	167.7	166.8	166.8	166.8
30°	179.1	179.1	181.0	182.0	183.9	183.9	183.9	181.0	180.1	179.1	179.1
32.5°	191.4	192.4	194.3	196.2	198.1	198.1	199.0	195.2	193.3	192.4	192.4
35°	204.7	205.7	207.5	210.4	212.3	213.2	214.2	210.4	207.5	206.6	206.6
37.5°	219.9	220.8	223.7	226.5	230.3	232.2	233.1	227.5	222.7	220.8	220.8
40°	236.9	237.9	240.7	244.5	248.3	250.2	251.1	245.5	240.7	238.8	237.9
42.5°	251.1	253.0	255.9	261.6	265.4	268.2	268.2	261.6	255.9	253.0	253.0
45°	264.4	266.3	271.0	276.7	282.4	285.3	284.3	277.7	271.0	267.3	266.3
47.5°	274.8	276.7	282.4	289.1	296.6	299.5	298.5	290.9	282.4	277.7	276.7
50°	280.5	281.5	288.1	297.6	305.2	308.0	306.1	298.5	289.1	282.4	281.5
52.5°	279.6	280.5	288.1	298.5	307.1	309.9	307.1	298.5	289.1	281.5	280.5
55°	273.9	274.8	282.4	293.8	302.3	305.2	302.3	293.8	283.4	275.8	274.8
57.5°	263.5	264.4	272.0	283.4	292.8	295.7	291.9	282.4	272.0	264.4	264.4
60°	248.3	249.2	256.8	269.2	277.7	280.5	275.8	268.2	257.8	249.2	248.3
62.5°	228.4	228.4	236.9	249.2	256.8	260.6	255.9	247.4	237.9	228.4	229.3
65°	204.7	203.8	212.3	223.7	232.2	235.0	230.3	222.7	213.2	204.7	204.7
67.5°	180.1	180.1	186.7	196.2	203.8	206.6	201.9	195.2	187.6	180.1	180.1
70°	153.5	153.5	158.3	167.7	174.4	176.3	173.4	166.8	160.2	153.5	153.5
72.5°	127.0	126.0	130.8	138.4	144.1	145.9	143.1	139.3	131.7	127.0	127.0
75°	100.5	99.5	102.4	109.0	113.7	115.6	112.8	109.9	104.2	100.5	100.5
77.5°	74.9	73.9	76.8	82.5	85.3	86.2	84.3	82.5	77.7	74.9	74.9
80°	51.2	50.2	52.1	55.9	58.8	58.8	57.8	56.9	53.1	51.2	52.1
82.5°	30.3	29.4	31.3	34.1	36.0	35.1	35.1	34.1	31.3	30.3	30.3
85°	13.3	12.3	13.3	15.2	17.1	16.1	16.1	16.1	14.2	13.3	13.3
87.5°	1.9	1.9	1.9	2.8	3.8	2.8	2.8	2.8	1.9	1.9	1.9
90°	6.4	6.4	7.7	7.7	7.7	7.7	7.7	7.7	7.7	6.4	6.4
92.5°	6.4	6.4	6.4	9.0	10.3	9.0	10.3	7.7	7.7	6.4	6.4
95°	7.7	7.7	9.0	11.6	14.2	15.5	15.5	9.0	9.0	7.7	7.7
97.5°	10.3	11.6	11.6	14.2	23.2	42.5	25.8	12.9	12.9	11.6	10.3
100°	16.7	18.0	18.0	32.2	68.2	91.4	65.7	33.5	24.5	18.0	18.0
102.5°	54.1	56.7	69.5	104.3	154.5	140.4	118.5	112.0	77.3	61.8	59.2
105°	137.8	136.5	146.8	173.8	216.3	212.5	195.7	177.7	153.2	141.6	141.6
107.5°	181.6	181.6	190.6	213.8	245.9	287.1	291.0	230.5	202.2	189.3	188.0
110°	204.7	204.7	212.5	231.8	274.3	332.2	329.6	284.6	249.8	233.1	230.5



REPORT NUMBER: P832827  
 CATALOG NUMBER: TTN-D0-735-U-WQ-SG-UPL3

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	209.9	211.2	221.5	251.1	297.5	323.2	311.6	293.6	278.1	265.3	262.7
115°	217.6	217.6	229.2	257.5	283.3	293.6	280.7	266.5	256.2	251.1	253.7
117.5°	215.0	218.9	221.5	236.9	253.7	261.4	255.0	235.6	227.9	225.3	221.5
120°	199.6	199.6	202.2	209.9	218.9	222.8	220.2	207.3	200.9	199.6	197.0
122.5°	177.7	179.0	177.7	181.6	188.0	191.9	189.3	179.0	176.4	176.4	173.8
125°	155.8	155.8	154.5	157.1	161.0	159.7	161.0	155.8	154.5	154.5	153.2
127.5°	140.4	139.1	136.5	137.8	139.1	139.1	140.4	135.2	136.5	137.8	136.5
130°	124.9	124.9	122.3	122.3	122.3	119.8	122.3	119.8	121.0	122.3	123.6
132.5°	110.7	110.7	106.9	105.6	105.6	105.6	106.9	105.6	108.2	110.7	110.7
135°	99.2	99.2	95.3	96.6	96.6	95.3	96.6	95.3	97.9	99.2	99.2
137.5°	90.1	90.1	87.6	87.6	87.6	86.3	87.6	87.6	88.8	91.4	92.7
140°	82.4	82.4	81.1	81.1	79.8	81.1	81.1	81.1	82.4	83.7	83.7
142.5°	78.5	77.3	76.0	74.7	76.0	76.0	76.0	74.7	76.0	78.5	78.5
145°	72.1	72.1	70.8	70.8	70.8	72.1	70.8	70.8	72.1	72.1	73.4
147.5°	68.2	68.2	67.0	68.2	68.2	68.2	68.2	67.0	68.2	68.2	69.5
150°	67.0	65.7	64.4	65.7	65.7	64.4	64.4	64.4	64.4	65.7	65.7
152.5°	63.1	63.1	61.8	63.1	61.8	61.8	61.8	61.8	61.8	63.1	64.4
155°	60.5	60.5	59.2	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
157.5°	57.9	59.2	57.9	57.9	57.9	57.9	57.9	57.9	57.9	59.2	59.2
160°	56.7	56.7	56.7	56.7	55.4	55.4	55.4	56.7	56.7	56.7	57.9
162.5°	55.4	55.4	55.4	55.4	54.1	54.1	54.1	54.1	55.4	55.4	56.7
165°	55.4	54.1	54.1	54.1	52.8	52.8	52.8	52.8	54.1	55.4	54.1
167.5°	52.8	52.8	52.8	52.8	52.8	51.5	51.5	52.8	52.8	52.8	54.1
170°	52.8	52.8	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	52.8
172.5°	52.8	52.8	52.8	52.8	51.5	51.5	51.5	51.5	51.5	52.8	52.8
175°	52.8	52.8	52.8	52.8	51.5	51.5	51.5	52.8	52.8	52.8	51.5
177.5°	52.8	52.8	52.8	52.8	51.5	52.8	52.8	52.8	52.8	52.8	52.8
180°	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8

(END OF REPORT)